ECOLOGICAL NOTES ON RECENTLY DESCRIBED MYRIAPODS FROM NEVADA[1]

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During 1959 the Department of Zoology of Brigham Young University, under contract with the U.S. Atomic Energy Commission, initiated ecological studies at the Nevada Test Site (Allred, Beck, and Jorgensen, 1965). The chilopods and millipeds collected in can pit-traps from 1959-1962 (Allred, Beck, and Jorgensen, 1963a) were submitted to Dr. Ralph V. Chamberlin for identification. Most of these represented species new to science and subsequently were described by him (Chamberlin, 1962a, 1962b, 1963, 1965). He intended to publish complete data for all the specimens taken from the test site, but was unable to do so before his death in 1967. This paper provides the ecological distribution and seasonal occurrence of the myriapods identified by Chamberlin, and furnishes additional data on the species which he described as new from the test site.

Chilopoda

Abatorus allredi Chamb.

Chamberlin (1965) diagnosed a new genus and described a new species from a male taken from "Nevada: Nye Co., Nevada Test Site," in 1961, and several specimens from "California: Riverside, Box Springs." The specific collection site in Nevada is in an area of mixed brush, 0.3 mile south of White Rock Spring (refer to Allred, Beck, and Jorgensen, 1963b, study area 12 C J).

Eremorus becki Chamb.

The type species of this new genus was described by Chamberlin (1963), with data listed as "Type locality: Nevada Test Area. Two specimens taken 6 March 1961." He identified three specimens from the site as referable to this species. Two were taken from a mixed brush habitat on 3 March 1961 near Cane Springs (collection code CBA 15; Allred et al., 1963b), and one from a *Grayia spinosa-Lycium andersonii* plant community on 6 March 1961 near test area ground zero 1 (collection code 1BF25; Allred et al., 1963b).

Gosibius arizonensis Chamb.

Twenty-three specimens of this species were taken at the test site. Collections are represented for each month except February, March, September, and October; and greatest numbers were found during November. Specimens were most abundant in the *Pinus monophylla-Juniperus osteosperma* plant community, with about half as many in mixed brush areas. Few were found associated with

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the *Grayia spinosa-Lycium andersonii* community, and none with other plant types. Animals were found at eight major study areas over the site, and most of those in the mixed brush areas were taken near Cane Springs

Nyctunguis stenus Chamb.

Chamberlin (1962b) described this species, apparently from two specimens submitted to him, with the type locality designated as "Nevada: Clark Co., Mercury, Nevada Test Area." These were taken from a *Pinus monophylla-Juniperus osteosperma* plant community on 28 November 1959, 0.5 mile south of the "Y" on the eastern edge of Rainier Mesa (collection code 12 CA; Allred et al., 1963b).

Oabius mercurialis Chamb.

This species was described by Chamberlin (1962b) from a female "taken Jan. 26, 1961" from a *Grayia spinosa-Lycium andersonii* plant community near ground zero 1 at the Nevada Test Site (collection code 1BB20; Allred et al., 1963b). "A second specimen taken Dec. 19, 1960" from the same habitat as the type was also used. Eleven other specimens were taken from six major study areas on the site from December through March, and in July. Specimens were most abundant in the *Pinus monophylla-Juniperus osteosperma* and mixed brush plant types, but were also found in *Salsola kali*, *Atriplex confertifolia-Kochia americana*, and *Grayia spinosa-Lycium andersonii* communities.

Scolopendra michelbacheri Verh.

Chamberlin (1962b) listed specimens of this species from "Nevada: Mercury, Clark Co., Nevada Test Area." A total of 49 were collected from 11 major study areas at the site. Most animals were taken during June and July, and were found during every month except January. These chilopods were most abundant in the *Grayia spinosa-Lycium andersonii* plant community and occurred in less abundance in mixed brush, *Larrea divaricata*, *Lycium pallidum*, *Coleogyne ramosissima*, and *Atriplex confertifolia-Kochia americana* areas.

DIPLOPODA

Arinolus nevadae Chamb.

This species was described by Chamberlin (1962a) from "Nevada: Mercury and adjacent area," with "many specimens taken mostly in October, November, and December 1960." A total of 112 specimens were collected from 11 major study areas at the site. Animals were taken from October through March, and in August. Most were taken during November, December, and February. These millipeds were most abundant in the *Lycium pallidum* and *Salsola kali* vegetative areas, with fewer numbers in mixed brush, *Artemisia tridentata*, *Grayia spinosa-Lycium andersonii*, *Larrea divaricata*, and *Coleogyne ramosissima* areas.

Arinolus sequens Chamb.

Chamberlin (1962a) described this species from a male taken 10 November 1960 in a *Coleogyne ramosissima* plant community in "Nevada: vicinity of Mercury." The specific locality is 9.5 miles north of Well 3B along Groom Lake road, thence 0.5 mile east (collection code 10 DA 1; Allred et al., 1963b).

Orthichelus michelbacheri (Verh.)

"Numerous specimens" were indicated by Chamberlin (1962a) from Nevada. Fifty were taken from eight major study areas at the test site between October and March. Most were taken during November. Greatest abundance occurred in the *Lycium pallidum* and mixed brush communities with fewer numbers in the *Grayia spinosa-Lycium andersonii*, *Coleogyne ramosissima*, and *Larrea divaricata* communities.

Titsona tida Chamb.

This species was described by Chamberlin (1962a) from two specimens taken 31 March 1960 from "Nevada: Nevada test area, vicinity of Mercury." The specific area is in a *Grayia spinosa-Lycium andersonii* plant community near ground zero 1 (collection codes 1 BF 4 and 1 BH 21; Allred et al., 1963b).

Summary

Chilopods of six species and millipeds of four species are known from the Nevada Test Site. Those of greatest abundance and most widespread ecologically are *Scolopendra michelbacheri* and *Arinolus nevadae*, respectively. Myriapods were most abundant in the *Pinus-Juniperus*, *Grayia-Lycium*, *Lycium*, and mixed brush plant communities. Greatest numbers were found during November from 1959 to 1962.

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